

TAC Xenta 527-NPR

Security Router

The TAC Xenta 527-NPR is a cost-effective and feature-enhanced version of the I/NET Net Plus Router. The TAC Xenta 527-NPR carries out many of the functions of a host PC but at a controller level, which reduces any dependence on host computers. The NPR deals with peer-to-peer point interaction, and manages and buffers events as necessary. All stored events and transactions are fully protected against loss of power by onboard batteries. The Xenta 527-NPR only supports connections to I/NET networks. It does not support LonWorks, or any other protocols.

This version of the Xenta 527-NPR introduces the ability to create segmented IP networks within an I/NET architecture. Encryption is available at the Ethernet level for high security applications. Configuration is performed using I/NET, a serial terminal, or pre-defined web pages. The Xenta 527-NPR does not require and is not supported by TAC XBuilder.

PERFORMANCE

I/NET Network

The TAC Xenta 527-NPR has the capability to act as a Net Plus Router within that system. The TAC Xenta 527-NPR has been tested to deliver up to a maximum of 15 I/NET alarms/events/transactions per second or 1.3 million per day. The maximum burst can be up to 40 per second for 8 seconds.

The thruput for a single TAC Xenta 527-NPR is determined by the amount of polling the device is managing. Polling is created mainly by

- Points on open graphics pages
- The scan rate of connection objects
- The volume of alarm and event traffic

The physical size of the connected I/NET system is a factor in this but is not a primary limitation.

In some systems therefore more than one TAC Xenta 527-NPR may be required to handle the total system traffic.

TECHNICAL DATA

Supply voltage	24 V AC ±20%, 50/60 Hz or 19–40 V DC
Power consumption	max. 5 W
Transformer sizing	5 VA

Ambient Temperature

Storage	–20 °C to +50 °C (–4 °F to +122 °F)
Operation	±0 °C to +50 °C (+32 °F to +122 °F)
Humidity	max. 90% RH non-condensing

Mechanical

Enclosure	ABS/PC
Enclosure rating	IP 20
Flammability class, materials	UL 94 V-0
Dimensions	see Fig. 1
Weight	0.2 kg (0.44 lb.)

Real Time Clock

Accuracy at +25 °C	±12 minutes per year
Power failure protection	72 h

Communication

A: RS232	2400 – 57600 bps, RJ45, 8-p
A: RS485	2400 – 57600 bps, async. terminal block
B: RS232	RJ10, 4-p
C: RS485	sync. (SDLC) terminal block
LonWorks	TP/FT-10, terminal block
Ethernet	TCP/IP, 10Base-T, RJ45

Agency Compliances

Emission:	
CE	EN 61000-6-3
C-tick	C-Tick N1831
FCC	FCC Part 15, Subpart B, Class B
Immunity:	
CE	EN 61000-6-2
Safety:	
CE	EN 61010-1
UL 916	C-UL US Listed
RoHS directive	2002/95/EG

Part Numbers

TAC Xenta 527-NPR	007308210
Terminal part TAC Xenta 400	007309020
TAC Xenta: Programming Serial Kit	007309200

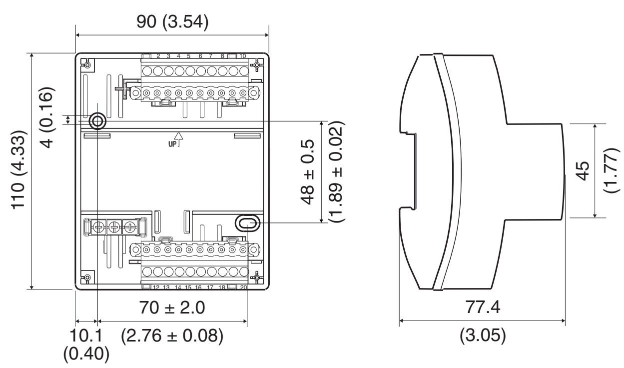


Figure 1

WEB INTERFACE
TAC Xenta 527-NPR uses a web interface to configure network, time, servers and ports among others.

CABLES
G and G0: Min. cross-sectional area 0.75 mm² (AWG-19).

C1 and C2: TAC Xenta 527 web server communicates on a joint network, LonWorks TP/FT-10, 78 kbps.

SECURITY
TAC Xenta 527-NPR uses a secure interface for configuration with username and password logon.

The TAC Xenta 527-NPR supports configurable I/P level encryption and I/P level filtering when being used in a security network.

DESIGN AND MOUNTING
The TAC Xenta 527-NPR is designed around a microprocessor. The device consists of two parts, a terminal including the terminal block, and the electronics with the circuit boards and contacts (fig. 2).

Power Outage Protection
Settings, like configuration and web pages, are stored in the non-volatile (flash) memory and will not be lost after a power outage.

Real Time Clock
The clock provides the internal event log with a time stamp. A built-in capacitor maintains operation of the clock for at least 72 hours in the event of a power failure. This real time clock can be configured to synchronize with the TAC I/NET host and automatically adjust for day light saving changes.

Mounting
The TAC Xenta 527-NPR is cabinet mounted on a TS 35 mm norm rail EN 50022.

To simplify installation, the terminal can be pre-mounted in the cabinet, (fig. 2).

If the TAC Xenta 527-NPR is to be wall mounted, a wide range of standardized boxes are available.

INSTALLATION/CONNECTION
Modular Jacks
- RS232 A: Modem connection. Connection using hardware signals for modem communication.
- RS232 B: PC ("Console") connection. Connection using basic signals, primarily intended for a PC during configuration.
- 10Base-T: Connection for a LAN (Ethernet) cable and commissioning.

MMC
Connection for a MultiMedia Card (extra memory card). Not required for TAC Xenta 527-NPR.

Terminal Connections

Term.	Term. No.	Description Name
1	G	24 V AC (or DC+)
2	G0	Ground
3	C1	LonWorks TP/FT-10
4	C2	LonWorks TP/FT-10
5	RX/TX+	RS485 A
6	RX/TX-	RS485 A
7	RX+	RS485 A
8	RX-	RS485 A
9	G0	
10	Fail-safe	
–		
–		
19	RX/TX+	RS485 C (SDLC)
20	RX/TX-	RS485 C (SDLC)

CONFIGURING
The TAC Xenta 527-NPR is configured using a combination of specialized web pages, a serial terminal, and I/NET Seven clients.

SNMP
TAC Xenta 527-NPR can communicate using Simple Network Management Protocol (SNMP) which allows the exchange of management information between network devices. It is part of the TCP/IP protocol suite.

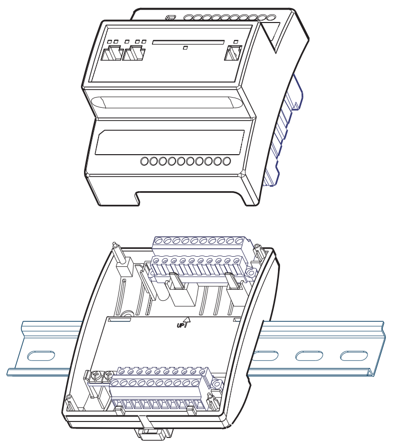


Figure 2

ACCESSORIES
Serial Communication
For installing the TAC Xenta 527-NPR, cable kit 007309200 is needed, ordered separately.

Modem Connection
For connecting the TAC Xenta 527-NPR, cable kit 007309160 is needed, ordered separately.

Cable
The TAC Xenta 527-NPR is connected to the Ethernet network with a standard UTP-cable or a standard STP-cable.

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For more information visit

www.schneider-electric.com/buildings